

**REMARKS**

Claims 1, 3, 4, 7, 13-16, 19-40, and 49 are pending in the current application, with claim 49 being newly presented for examination by this Amendment. Claims 1, 3, 4, 7, 13-16, and 19-40 currently stand rejected, and claims 1, 7, 13, 19, 24, 30, and 36 have been amended. Reconsideration and allowance of claims 1, 3, 4, 7, 13-16, 19-40, and 49 are respectfully requested in light of the preceding amendments and following remarks.

**Claim Rejections – 35 U.S.C. § 112**

Claims 1, 3, 4, 7, 13-16, and 19-40 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner alleges that the claim term “control information unit being repeatedly recorded in a second data field area in the lead-in area of the computer readable medium” which is separate from the first area including the copy control information is not supported by the original specification, because paragraph [0038] indicates that copy protection information is recorded together with a flag indicating the same. Applicants respectfully submit that the independent claims require only that control information units be repeatedly recorded in one area and copy protection information recorded in a second area. The claims do not recite that the control information units cannot be in both areas or that the copy protection information cannot be in both areas - these pieces of information only need be in different areas under the claims. Applicants respectfully direct the

Examiner to paragraphs [0034], [0036], and [0038] for an example of where control information units are repeatedly recorded in a first area (paragraphs [0034] & [0036]), but copy protection information is stored with control information units in a second area (paragraph [0038]).

Applicants respectfully submit that the claim term “control information unit being repeatedly recorded in a second data field area in the lead-in area of the computer readable medium” is supported at least by these examples. Withdrawal of the rejection under 35 U.S.C. § 112 first paragraph to claims 1, 3, 4, 7, 13-16, and 19-40 is respectfully requested.

#### Claim Rejections – 35 U.S.C. § 101

Claims 1, 3, and 4 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants respectfully note that claim 1 has been amended to recite a “non-transitory computer readable medium,” such that the claim cannot be interpreted as including only signals. As such, claims 1, 3, and 4 recite physical storage apparatuses such as optical disks, magnetic tape, punch cards, flash memory, etc. Withdrawal of the rejection under 35 U.S.C. § 101 to claims 1, 3, and 4 is respectfully requested.

#### Claim Rejections – 35 U.S.C. § 103

Claims 1, 3, 4, 7, 13-16, and 19-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Pat 6,938,162 to Nagai et al. (“Nagai”) in view of US Pat 5,737,286 to Timmermans et al. (“Timmermans”) and US Pat

7,266,074 to Kim et al. ("Kim"). Applicants respectfully traverse this rejection for the reasons detailed below.

With regard to the independent claims, Applicants note that these claims have been amended to recite that the control information unit includes a copy protection presence indicator, "medium size information, medium structure information, and data zone allocation information." Further, the claims were previously amended to recite "the control information unit" having the recited pieces of information is "repeated in the lead-in zone." The Examiner does not account for either of these elements with Nagai, Timmermans, or Kim. As such, the current rejections must be withdrawn at least because claim elements remain unaccounted for.

The rejections under § 103 must further be withdrawn because Nagai cannot be combined with Timmermans to meet the claims as previously presented. The Examiner admits that Nagai fails to teach "the copy protection indicating information and the copy protection information being recorded in a wobbled pattern by a bi-phased modulation method" as recited in each independent claim, so the Examiner modifies Nagai with Timmermans to meet the claims by changing the scramble control information 407 of Nagai into a frequency of a wobbled recording pattern as done in Timmermans. Applicants respectfully submit that Nagai teaches away from such modification with Timmermans, because Nagai is not operable with such modification. Particularly, Nagai stores all of its descrambling keys and indicators of the keys conventionally and explicitly states the advantages of having **all descrambling**

**information in a same, exclusive area** for copy protection purposes. See Nagai, Col. 13, ll. 24-46; Col. 54, ll. 56-65. The wobbled pattern in Timmermans, however, is **present throughout the entire disc and main data**, and the wobbled pattern is **necessarily reproducible from the same**, since the wobbled data is content data. See Timmermans, FIGS. 1a & 1b; Col. 3. l. 40 – Col. 4, l. 33. That is, because the modulation of the pattern of pits of content data in Timmermans is the decryption key, the key must be necessarily stored across several, non-exclusive areas of content data. Thus, Nagai's stated goal of single-area, exclusive storage of descrambling keys is impossible with the technology of Timmermans. Eliminating a reference's stated advantage or altering its operating principle through modification teaches away from such modification and is impermissible under § 103. See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1326-28 (Fed. Cir. 2009) (discussing teaching away in modifying a pedicle screw to remove its rigidity, a stated purpose of the unmodified screw). Because a combination of Nagai with Timmermans is taught away from by Nagai, these references cannot be combined to render any claim obvious under § 103(a).

In related application 11/367,599, the Examiner rejected claim language similar to the missing “medium size information, medium structure information, and data zone allocation information” and “the control information unit” having the recited pieces of information is “repeated in the lead-in zone” as non-functional descriptive material and by applying US Pat 6,072,758 to

Tajiri ("Tajiri"). The following remarks are offered only in the instance that the Examiner pursues the same course in the present application.

Applicants respectfully submit that the recited repeated control information units, and their contents, are inescapably functional descriptive material entitled to patentable weight. The claims themselves recite "control information unit **configured to control recording or reproducing** main data on the recording medium." That is, the control information units, by the language of the claim, must control how main data is recorded or reproduced by an appropriate recording/reproducing apparatus. This is in sharp contrast to typical nonfunctional descriptive material such as **music, literature, art, photographs, and mere arrangements or compilations of facts or data** recorded where they cause no apparatus to engage in a particular function and certainly do not control recording or reproducing of other data from a recording medium as recited in the claims. See MPEP § 2106.01. Further, the Examiner appears to account for at least a single information control unit with the combination of Nagai and Tajiri. Applicants respectfully submit that if a single information control unit must be accounted for as functional descriptive material in the art grounds of rejection, then repeated information control units should be equally accounted for and not dismissed as non-functional descriptive material.

It is further readily appreciable that the recited disc information, such as disc size, disc structure, and/or data zone allocation, affects how all data in the recording medium can be read and reproduced from the recording medium.

The disc-wide effects of the control information units require repeated recordation of the control information unit, as shown in the specification by the example embodiments having disc information repeatedly recorded. By recording a copy protection information indicator such as CPI\_rec\_Flag along with other control information, recordation and/or reproduction of main data according to control and copy protection information in the recording medium may be quickly executed. In order to prevent the control information unit including the disc information and the identifier from being easily detected and illegally copied, the repeated control information units are further recorded in a wobbled pattern in the claims, requiring unique reproducing apparatus functionality to read the same. As such, the recited repeated storage of the information control units imparts several functions to machines interacting with recording media storing the same.

Lastly, there is no reason to combine Tajiri with Nagai to meet the claims. Medium size and structure information from Tajiri, even if inserted into every content block 508 of Nagai, would be the same in all blocks 508 on the same recording medium, whereas each block 508 in Nagai is otherwise unique, depending on its original content. One skilled in the art would more readily include Tajiri's universal disk information in a general disk identification information area 305 in Nagai, not in **unique** content information blocks 508 of Nagai. Placing disc-wide information in each and every unique content information block 508 would needlessly consume resources, mix general and specific information types, and serve no delineated purpose aside

from meeting the current claims. As such, the Examiner has not identified a modification rationale that would apply to the facts at hand or why the skilled person would have forgone the easier route identified above. See “Examination Guidelines Update: Developments in the Obviousness Inquiry After KSR v. Teleflex,” 75 FR 53643, 53645 (Sept. 1, 2010) (“Rationales should not be treated as per se rules, but rather must be explained and shown to apply to the facts at hand. A similar caveat applies to any obviousness analysis. Simply stating the principle (e.g., ‘art recognized equivalent,’ ‘structural similarity’) without providing an explanation of its applicability to the facts of the case at hand is generally not sufficient to establish a prima facie case of obviousness”); *see also*, In re Omeprazole Patent Litigation, 536 F.3d 1361, 1380-1381 (Fed. Cir. 2008) (claims to a modification are likely non-obvious where the skilled artisan likely would have chosen a different modification). As such, Nagai and Tajiri lack the repeated control units having the recited information of claims 41, 52, and 61 and are anyway not combinable to meet these claims under § 103(a).

Because Nagai, alone or in combination with Timmermans and Kim, fails to teach or suggest every element of claim 1 and cannot be modified to do so, these references cannot anticipate or render obvious claim 1. Claims 7, 13, 19, 24, 30, and 36 are equally allowable over these references for reciting the same unique elements of claim 1, discussed above. Claims 3, 4, 14-16, and 20-23, 25-29, 31-35, and 37-40 are allowable at least for depending from an allowable

base claim. Withdrawal of the rejection to claims 1, 3, 4, 7, 13-16, and 19-40 under 35 U.S.C. § 103(a) is respectfully requested.

**CONCLUSION**

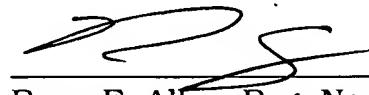
Accordingly, in view of the above amendments and remarks, reconsideration of the rejections to and allowance of each of claims 1, 3, 4, 7, 13-16, and 19-40 in connection with the present application is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ryan Alley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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